

Virtual District, Real Improvement:

A retrospective evaluation of the Chancellor's District, 1996-2003

Deinya Phenix, Dorothy Siegel, Ariel Zaltsman, Norm Fruchter

About the Institute for Education and Social Policy (IESP)

The New York University Institute for Education and Social Policy was formed in 1995 to improve public education so that all students, particularly in low-income neighborhoods and communities of color, obtain a just and equitable education, and can participate effectively in a democratic society. Our research, policy studies, evaluations and strategic assistance inform policy makers, educators, parents, youth, and community groups in their efforts to improve public schooling. For more information, visit our website at www.nyu.edu/iesp.

You may copy or distribute this report for personal or noncommercial use, as long as all copies include the title page and this copyright page. The report may not be modified or displayed on other websites or intranets without the written permission of the Institute for Education and Social Policy.

This document is available from the:

Institute for Education and Social Policy, New York University 726 Broadway, 5th floor · New York, NY 10003 Tel (212) 998-5880 · Fax (212) 995-4564 · iesp@nyu.edu · www.nyu.edu/iesp

COPYRIGHT ©2004

Design: Sarah Sills

Table of Contents

1.	Introduction	. 1
II.	The Design of the Chancellor's District	. 6
III.	Methods and Data	. 12
IV.	Findings	. 15
V.	Conclusion	. 26
	Works Cited	. 28
	Appendix	20

Acknowledgements

We are very grateful to the New York City Department of Education and the New York State Education Department for providing information and access that made this study possible. In particular, we thank Dr. Sandra Kase, Supervising Superintendent of the Chancellor's District from 2000 through 2003, and her staff who were very generous with their time and knowledge.

We also thank Bree Picower and Margaret Murphy, our colleagues at the Institute, who helped research and shape an earlier version of this study that was presented at the 2003 annual meeting of the American Education Research Association; Professors Amy Ellen Schwartz and Leanna Stiefel and doctoral candidate Dae Yeop Kim of the NYU Robert F. Wagner School of Public Service; Professor Richard Arum of the NYU Steinhardt School of Education, who provided critical assistance with our analysis; and many colleagues at the Institute, especially Hella Bel Hadj Amor, Colin Chellman, Patrice Iatarola, Ben Kennedy, Natascha Pchelintseva and Geraldine Pompey.

Finally, we are grateful to Dr. Irving Hamer, former member of the New York City Board of Education, for urging us to undertake this study, and to the J.P. Morgan Chase Foundation for providing initial support.

I. Introduction

his study is a retrospective analysis of the outcomes of the Chancellor's District, a virtual district created to improve New York City's most poorly performing public schools. New York City Schools Chancellor Rudy Crew initiated the district in 1996 to remove state-identified low-performing schools from their sub-district authorities, and to accelerate their improvement by imposing a centralized management structure, a uniform curriculum, and intensive professional development. The initiative was terminated in 2003 when a new, Mayoral-controlled regime restructured the city school system.

The seven-year Chancellor's District initiative represents both an unprecedented intervention into New York City school governance, and a major challenge to several reigning theories about the relationship between centralized administration and local school change. Consider, first, how the Chancellor's District departed from the New York City school system's governance norms.

From 1969 to 2003, New York City's public elementary and middle schools were governed by 32 community school districts, (hereafter sub-districts) run by elected school boards and their appointees, the community superintendents. These sub-districts were quite large, averaging more than 20,000 students, with several of the largest districts enrolling more than 40,000 students. Many sub-districts would have ranked among the 50 largest school systems in the country had they been independent jurisdictions.

Though the grim correlations among race, poverty and student achievement that characterize most urban districts also persist in the New York City school system, individual school outcomes varied widely both across, and within, the community school sub-districts. Academic performance was especially poor, and particularly highly correlated with indicators of race and poverty, in those sub-districts whose governance was marked, and marred, by patterns of corruption, nepotism, patronage and, most importantly, a consistent failure to focus on improving teaching and learning.

The school system's central administration, governed by an appointed citywide board of education and a chief administrative officer (the Chancellor), had possessed the authority to remove failing schools from their community school sub-districts since the city system was decentralized in 1969. But that power remained unexercised for almost three decades until Chancellor Rudy Crew removed ten chronically low-performing schools from the administrative control of their local sub-districts in 1996. He created a new sub-district, geographically non-contiguous, and imposed the same improvement regimen on each of the ten failing schools. Under Crew and subsequent chancellors,

The seven-year Chancellor's District initiative represents both an unprecedented intervention into New York City school governance, and a major challenge to several reigning theories about the relationship between centralized administration and local school change.

¹ Under the state legislation, which decentralized the city's school system in 1969, responsibility for high schools, as well as for special education and operations functions such as personnel, transportation, facilities construction and maintenance, school meals, purchasing and security, remained centralized.

² The ten schools had been identified by the New York State Education Department (SED) as failing schools, and had been repeatedly placed on the state's list of Schools Under Registration Review (SURR).

the Chancellor's District became a virtual citywide zone that eventually removed some 58 elementary and middle schools from local sub-district control.³

This effort to remove failing schools from their sub-district jurisdictions in order to improve them is unique in New York City school governance. From the onset of decentralization, central leadership had bemoaned sub-district failure but had refused to intervene, either to force sub-districts to take steps to improve their schools or to take failing schools away from local sub-district control. Chancellor Crew's assertion of the power to take over failing schools, and his creation of a virtual district to force-feed their improvement, represents a historic departure from three decades of central administrative passivity.

Chancellor Crew's
assertion of the
power to take over
failing schools,
and his creation of
a virtual district
to force-feed their
improvement,
represents a historic
departure from three
decades of central
administrative

passivity.

But the Chancellor's District initiative is also unique in recent large-scale reform efforts. Given the scale and complexity of the New York City system, the Chancellor's District initiative is akin to state takeover efforts of poorly performing districts. Because the Chancellor is responsible for more schools (currently over 1,200) than many state chiefs, the Chancellor's administrative relationship to the 32 community school sub-districts was comparable to state commissioners' relationships to their local school districts. Moreover, since most states' takeover efforts of local districts have been for financial mismanagement rather than instructional failure, very few state takeovers have targeted as many schools for restructuring, redesign and instructional improvement as the Chancellor's District effort.

The Chancellor's District initiative also poses a strong challenge to three arguments in the research about the relationship between district administration and school change. Historically, many researchers and critics have inveighed against the effects of scale and the resulting bureaucracies, contending that large urban systems have become ungovernable and impervious to reform efforts. Seymour Sarason's classic analysis maintained that big-city schools are "insulated," "encapsulated," and in other ways immune from hierarchically imposed efforts to alter dysfunctional practice at the school level.4 In another classic study, Weick argued that the "loose coupling"5 within the various layers of complex urban systems stymies the efforts of centralized interventions to produce changes in school practices that might lead to school improvement. In a local critique, Domanico argued that, despite reform efforts that include tougher standards and new management, the size of the New York City school system itself thwarts change because "there is little that a centralized New York City Board of Education can do to repair the unique cultures of over 900 public schools."6 This analysis of the inevitable barriers to change that scale and hierarchical complexity impose may not necessarily imply reform from below or one-school-at-a-time change.

³ Across the seven years of the operation of the Chancellor's District, ten high schools were also included. We do not examine the high schools in this analysis for two reasons. First, under decentralization, high schools remained under the authority of the citywide central administration, so those failing high schools placed in the Chancellor's District were not removed from local jurisdictions as elementary and middle schools were. Second, high schools placed in the Chancellor's District were subjected to a different intervention than the elementary and middle schools.

⁴ Seymour B. Sarason, *Revisiting the Culture of the School and the Problem of Change* (New York: Teachers College Press, 1996): 15.

⁵ Karl E. Weick, "Educational Organizations as Loosely Coupled Systems," *Administrative Science Quarterly 21* (1976): 3.

⁶ Raymond Domanico, "Undoing the Failure of Large School Systems: Policy Options for School Autonomy," *Journal of Negro Education 63* (1994): 19-27.

But the critique's prognosis of the likely effectiveness of centralized administrative efforts to drive change is quite bleak. The Chancellor's District's forced-march efforts to improve the schools taken from their local sub-districts directly challenge this critical tradition.

Second, the Chancellor's District initiative challenges several influential currents of recent reform theory that link the necessity for decentralization with the need to provide maximum autonomy at the school level to achieve successful schools. In *Politics, Markets and America's Schools*, John Chubb and Terry Moe argued that the key characteristic that distinguishes academically effective private schools from less effective public schools is the extent of autonomy at the school level.

America's existing system of public education inhibits the emergence of effective organizations. This occurs, most fundamentally, because its institutions of democratic control function naturally to limit and undermine school autonomy.⁸

Chubb and Moe's influential arguments stressed the inevitability of bureaucratization and consequent poor school performance unless schools are severed from district control and governed by market principles.

Democratic control tends to promote bureaucracy, markets tend to promote autonomy, and the basic dimensions of school organization—personnel, goals, leadership and practice—tend to differ in ways that reflect (and support) each sector's disposition toward bureaucracy or autonomy.⁹

Recent theoretical efforts to establish the primacy of the school, rather than the district, as the locus of improvement have not been monopolized by conservative scholars or market advocates. The Cross City Campaign for Urban School Reform, an advocacy organization composed of city reform groups, education advocates and parent activists, published an influential report in 1995, *Reinventing Central Office:* A *Primer for Successful Schools*, that urged radical decentralization, to the school level, of all essential instructional and administrative functions, leaving school districts with only vestigial governing roles. The authors of *Reinventing Central Office* argued that urban school districts had consistently failed to implement effective improvement efforts, and characterized their administrations as retarding forces that stifled school-based reform efforts.

A third recent and influential reform stream stresses the necessity for bottom-up or school-by-school reform efforts. Several national reform consortia, such as the Coalition of Essential Schools, the School Development Program, the Accelerated Schools project

Chubb and
Moe's influential
arguments stressed
the inevitability of
bureaucratization
and consequent poor
school performance
unless schools are
severed from district
control and governed
by market principles.

⁷ John E. Chubb and Terry M. Moe, *Poilitics, Markets and America's Schools* (Washington, D.C.: The Brookings Institution, 1990).

⁸ Ibid., p.23.

⁹ Ibid., p.61.

¹⁰ Hallett, A. (Ed.) *Reinventing Central Office: A Primer for Successful Schools*. (Chicago: Cross City Campaign for Urban School Reform, 1995).

and the New American Schools, all focus on the need to generate individual school improvement through the implementation of replicable programs. This reform stream was elevated into national prominence through federal legislation, the Comprehensive School Reform Demonstration program, popularly known as the Obey-Porter Act of 1997, which has allocated more than \$300 million annually for grants to individual schools to implement supposedly research-validated improvement models. The role of the district in initiating, coordinating, or supporting these school-based efforts was, at best, subordinated to the role of the intermediary organizations marketing the particular models or, at worst, essentially untheorized.¹¹

The Chancellor's

District involved

both a governance

change and a

coherent set of

capacity-building

interventions

presumably

unavailable to lowperforming schools

under inept local

sub-district control.

These reform currents that target individual schools as key improvement sites have begun to be challenged by efforts to define the school district as the necessary locus of capacity-building initiatives. Ascher and her colleagues, for example, argued in 1999 that the local district "is the critical actor that can encourage or retard the school's development of the necessary capacity for self-improvement." The Council of Great City Schools' *Foundations for Success* (2002) analyzed the efforts of three urban districts to improve student academic performance, and to narrow the achievement gap between white students and students of color. The Annenberg Institute for School Reform has created School Communities that Work: A National Task Force on the Future of Urban Districts, to help districts restructure themselves into effective support systems focused on improving instruction. The University of Pittsburgh's Learning Research and Development Center has created the Institute for Learning to help urban districts reorganize and improve their capacities to help their schools, and themselves, become continuous learning organizations.¹³

But in 1996, Chancellor Crew was bucking several traditions of reform theory when he created a virtual citywide zone to take over and run schools whose local sub-districts had failed to improve them. Defining the core issues as the ability to mobilize the political will and instructional capacity necessary to improve schools, Crew asserted that the central administration could mandate the policies, implement the procedures and provide the resources necessary to transform failing schools. His theory of action defined centralized management, rather than decentralized local control, as the critical variable necessary to initiate, enforce and ensure the implementation of school improvement. Given this premise, the Chancellor's District involved both a governance change and a coherent set of capacity-building interventions presumably unavailable to low-performing schools under inept local sub-district control.

¹¹ Susan J. Bodilly. New American Schools' Concept of Break the Mold Designs: How Designs Evolved and Why. (Santa Monica, CA:RAND, MR-1288-NAS, 2001).

¹² Carol Ascher, Norm Fruchter, and Ken Ikeda. Schools in Context: Final Report to the New York State Education Department 1997-1998, An Analysis of SURR Schools and their Districts, (New York: Institute for Education and Social Policy, New York University, 1999).

Jason Snipes, Fred Doolittle, and Corinne Herlihy, Foundations For Success: Case Studies of How Urban School Systems Improve Student Achievement, (New York: MDRC for the Council of the Great City Schools, Sept. 2002. L.B. Resnick and Thomas K. Glennan, "Leadership for Learning: A Theory of Action for Urban School Districts." In A.M. Hightower, M.S. Knapp, J.A. Marsh & M.W. McLaughlin (Eds.) School Districts and Instructional Renewal. (New York: Teachers College Press, 2002), 160-172.

This paper describes the origins, structure, and components of the Chancellor's District, and details our findings about its outcomes for elementary schools. The Chancellor's District initiative ended in July 2003, with the implementation of a system-wide restructuring policy that reorganized the entire New York City school system. The 32 schools remaining in the Chancellor's District were transferred back to their local sub-districts, which were themselves subsumed into a new regional structure under the chancellor's direct control.¹⁴

Thus the Chancellor's District initiative is now history, and each of the new administrative regions is now responsible for improving its failing schools. But the extent to which the Chancellor's District initiative succeeded in improving performance outcomes, particularly in the failing elementary schools whose outcomes we examined, directly challenges the reigning theories that link school improvement to decentralization, and has important implications for the variety of school- and district-level improvement efforts underway in urban districts across the country.

The extent to which the Chancellor's District initiative succeeded in improving performance outcomes . . . has important implications for school- and district-level improvement efforts underway in urban districts across the country.

After the state legislature, in 2002, revised the decentralization law to give New York City mayors control over the city school system, Mayor Michael Bloomberg appointed a new school regime which recentralized and strengthened administrative power, abolished the community school districts and their elected school boards, and reorganized the school system into ten administrative regions.

¹⁵ The state's SURR mechanism, compounded by the requirements of the federal No Child Left Behind Act, continues to identify and sanction low-performing schools.

II. The Design of the Chancellor's District

uring their thirty-four years of relative autonomy, New York City's local community school sub-districts developed diverse, and differentially effective, patterns of operation. Consistently high performance characterized schools in some districts, while poor management and dismal student outcomes plagued schools in others. In almost half the city's schools, at least half the students consistently failed to achieve the state learning standards in English Language Arts or mathematics.¹⁶

Since 1989, the New York State Education Department (SED) has used the Schools Under Registration Review (SURR) process to identify low-performing schools, and place them on a list of schools under registration review. The creation of the Chancellor's District to improve the worst of New York City's failing schools was a response to the threat within the sanctioning mechanisms of the SURR process. SED requires SURR schools to create a comprehensive education plan, and can order chronically low-performing schools to undergo school redesign. Schools that fail to improve may have their registration revoked, which means they are effectively closed—the ultimate sanction of the SURR process.¹⁷

In October 1995, New York State Education Commissioner Mills informed New York City Schools Chancellor Crew that sixteen chronically low-performing New York City schools that had long languished on the SURR list would have their registrations revoked if student performance did not improve by June 1997. In response, Crew met with the schools' local sub-district superintendents, community school board members, principals, and parent leaders, and notified them that he was requiring the schools to develop and implement instructional improvement plans. In half the schools, he removed the principals and mandated comprehensive school redesign.

Unsatisfied with the sub-district and school responses to his actions, Crew decided, in February 1996, to intervene directly in schools in which, in his determination, the local sub-districts had "fail[ed] to demonstrate the capacity to redesign failing organizations." On his recommendation, the New York City Board of Education created the Chancellor's District—a virtual sub-district reporting directly to the Chancellor. The mission of this new entity was "to develop and expand central, district, and local school capacity to transform failing school organizations into redesigned and revitalized schools that meet high educational standards for students." Crew immediately transferred ten schools into the new virtual sub-district.²⁰

The creation of the Chancellor's District to improve the worst of New York City's failing schools was a response to the threat within the sanctioning mechanisms of the SURR process.

¹⁶ For example, according to school-level test results the NYC Department of Education published in 2002, in 623 schools at least half the students scored below the standards for their grade on the state or city English Language Arts tests in 2001-02. Of these schools, 563 had the same or worse results three years in a row.

¹⁷ Most of the schools placed on the SURR list have been in New York City, and 21 New York City elementary and middle schools were closed between 1997 and 2003.

¹⁸ Corrective Action Plan: v.

¹⁹ Corrective Action Plan: vi.

²⁰ These ten schools included three middle schools, six elementary schools, and one high school.

Eventually, fifty-eight elementary and middle schools were taken from their community school sub-districts and placed into the Chancellor's District in the seven years of its operation, from 1996-2003. (*See Table 1.*) These schools entered the District in annual cohorts of various sizes. By the end of the 2002-03 school year, the District had closed eleven schools and returned 15 to their home sub-districts. The Chancellor's District has taken over schools from every New York City borough except Staten Island, with a disproportionate number from the Bronx. Over seven years, the Chancellor's District had four supervising superintendents.²¹ There were 32 elementary and middle schools in the District at the time of its dissolution in June 2003.

The 1999-00 school year was a seminal year for the Chancellor's District. Between 1996 and 1999, the district had taken in only a small number of schools. But in the 1999-00 school year, after an extensive review of the patterns of failure across the city's low-performing SURR schools, Crew decided to take 37 more of the city's lowest performing schools into the Chancellor's District, and imposed a new, highly structured improvement plan, A Model of Excellence, on all the District's schools. Crew also increased staff capacity in all the SURR schools, especially those in the Chancellor's District. His goal was to remove every New York City school from the SURR list within two years.²²

Crew divided the city's SURR schools into three groups. Category 1 schools were those assessed at highest risk of continued failure. Category 2 schools were at the next

TABLE 1
Elementary and middle schools in the Chancellor's District, 1996

	NUMBER OF SCHOOLS										
Academic year	Entered the CD	Returned to home district	Closed								
1996-97	9	0	0								
1997-98	3	0	0								
1998-99	0	2	0								
1999-00	37	0	2								
2000-01	1	8	5								
2001-02	5	5	3								
2002-03	3	_	1								
Total	58	15	11								

Sources: New York State Education Department; New York City Board of Education

highest risk of continued failure. Category 3 schools were schools that were improving enough to become candidates for removal from the SURR list in the following year.²³ Ten of the elementary and middle schools Crew identified as Category 1 schools had already been placed in the Chancellor's District in previous years. Thirty-seven more Category 1 schools were added to the Chancellor's District in the 1999-00 school year. The remaining five Category 1 schools exhibited the same pattern of failure as the schools in the Chancellor's District, but were allowed to remain in their local districts because Crew decided that their sub-districts had the capacity to support their schools' improvement plans.²⁴

²¹ The last superintendent, Dr. Sandra Kase, took over in March 2000. The previous supervising superintendents for the Chancellor's District were Maria Guasp (1996), Barbara Byrd Bennett (1996-1998) and Arnold Santandreau (1998-2000).

²² Chancellor's District: A Model of Excellence for Extended Time Schools, 1999-2000. (New York: New York City Board of Education, 1999).

 $^{^{23}}$ Category 3 schools became Category 2 schools if the state did not remove them from the SURR list in 1999-00.

²⁴ The five schools were in three sub-districts, Districts 13, 19 and 23, which were engaged in other major reform initiatives. Districts 19 (two schools) and 23 (one school) were involved in the Breakthrough for Learning initiative of the New York City Partnership, and District 13 (two schools) was named a Model District by the chancellor. Their superintendents met monthly with the Chancellor's District Supervising Superintendent to coordinate implementation of the intervention.

Thus, in 1999-00, the Chancellor's District consisted of 47 of the city's SURR schools deemed to be the lowest performing elementary and middle schools.²⁵ The district was sub-divided into three regions, each with its own instructional superintendent.²⁶ The 53 remaining SURR schools were assigned to Categories 2 and 3.

In that same 1999-00 year, Chancellor's District schools began implementing the new Model of Excellence,²⁷ which included the following components:

First, class size was reduced throughout the district. A maximum of 20 students were mandated for kindergarten through grade 3, and 25 students for grades 4 through 8.

Second, instructional time was increased by extending both the school day and the school year. The school day was lengthened to 20 minutes longer than in other elementary and middle schools in New York City. The school calendar was also extended by one week.

Third, instructional time was further enhanced by developing after-school programs, implemented in each Chancellor's District school through a schedule of activities that extended the school day to 6 pm. The after-school program was designed to "enhance and enrich daily learning;" all the school's students were eligible to participate. Tutoring was offered from 3 to 4 pm in small group settings for those students in grades 3-5 who required extra reading or math assistance.

Fourth, a prescribed instructional program, a mandated daily schedule and a required curriculum were imposed throughout the district.²⁹ In elementary schools, the schedule mandated two daily 90-minute literacy blocks, the first using Success for All, and the second using the Balanced Literacy program. The daily schedule also included a 60-minute math block, using the Trailblazers math program; and a 30-minute skills block, alternating between math and literacy skills. Science and social studies were each taught once per week. In middle schools the schedule mandated one 90-minute daily literacy block, plus two literacy skills blocks per week; ten 45-minute math periods, using the Math in Context program; and one period each of science, social studies, technology, a second language, and physical education or an art class, as required by the state. Because the time devoted to literacy instruction in the elementary school schedule was almost three times what was assigned to math, the Chancellor's District was perceived, accurately, as concentrating on literacy skills improvement at the elementary level much more intensively than on math. Time devoted to literacy and math skills at the middle school level was more evenly divided.

Crew imposed
a new, highly
structured
improvement
plan, A Model of
Excellence, on all
the district's schools.
Crew also increased
staff capacity in all
the SURR schools,
especially those in
the Chancellor's
District.

²⁵ Because the Chancellor directly controlled the city's high schools, Crew also placed ten of the city's lowest performing high schools into the Chancellor's District.

²⁶ A year later, a fourth region was created. Three of the regions served elementary and middle schools; one served high schools.

²⁷ Primarily because it took a few months to develop the capacity to serve such a large number of schools, there was inconsistent implementation of the Model of Excellence in the 1999-00 academic year, according to Chancellor's District staff. For example, two of the publishers of instructional programs chosen for the Chancellor's District required time to train the staff developers for all the schools. However, implementation became consistent in subsequent academic years.

²⁸ Model of Excellence: 2.

²⁹ Chancellor's District staff member, personal interview, Nov. 25, 2002.

Fifth, the district also provided intensive professional development. Each school was assigned at least four on-site staff developers focused on English Language Arts, mathematics, technology and Success for All. Extra time was provided for professional development designed to be intensive, systematic, structured and aligned with the curriculum. Each school was provided with an on-site teacher center staffed by a teacher specialist who offered additional coaching and professional development.

Sixth, the district was heavily focused on student assessment. These assessments, integrated into the Success for All and Trailblazers programs, were designed to provide regular feedback to classroom teachers. In kindergarten through grade 3, the schools used New York City's Early Childhood Literacy Assessment System (ECLAS) to assess and improve literacy growth. Specially developed benchmark assessments in reading and mathematics were used to assess the performance of students in grades 3 through 8.

Finally, each Chancellor's District school was provided additional school-based supervisory personnel and extensive instructional support from the District's regional instructional office.

Category 2 and 3 schools ("other SURR schools") received fewer intervention components than schools in the Chancellor's District, as illustrated in Table 2 below. When a school was initially assigned to the Chancellor's District, a district team visited the school to evaluate conditions such as facilities, operations, personnel, scheduling, curriculum, and leadership.

Chancellor Crew allocated additional funds, initially \$20,000,000,³⁰ to begin implementing the Model of Excellence in the Chancellor's District schools.³¹ By the 2000-01 school year, when the Chancellor's District model was fully implemented, the District's schools spent an average of \$2,400 more per student than the other SURR schools.³²

TABLE 2
Components of the Model of Excellence

	Chancellor's District schools (N=49)	Other SURR schools (N=53)
Reduced class size	✓	
Extended school day and year	1	
After-school program	1	✓
Mandated instructional program	1	✓
Mandated daily schedule	1	
Mandated curriculum	1	
Number of on site staff developers	4	2
Extra time for staff development	1	
Prescribed staff development	✓ /	
Teacher center and teacher specialist	✓	✓
Student assessment program	✓	✓
Additional supervisory/district support	✓	

³⁰ Budget and Operations Review Memorandum #1 FY00. (New York City Board of Education, June 1999).

³¹ When Chancellor's District schools returned to their home districts, they received 100% of the funding needed to implement the Model of Excellence during their first year back in their home district, and 50% during their second year. Chancellor's District staff calculated an average excess per student cost of \$1,403 for the nine schools returned to their home districts in 2001-2002.

³² According to the New York City Board of Education School Based Expenditure Reports, FY 2001, Chancellor's District elementary and middle schools in 2000-01 spent an average of \$13,150 per student. Other SURR elementary and middle schools spent an average of \$10,744 per student that year. This compares to an overall average New York City per student expenditure of \$9,679 for elementary and middle school students.

This significant additional funding was directly targeted to implementing the specific interventions prescribed in the Model of Excellence.³³

Most of the increased spending represents increased teacher costs, including two programs designed to attract certified teachers to the Chancellor's District schools. Certified teachers who chose to work in Extended Time Schools (ETS) received 15% additional pay in exchange for additional work.³⁴ The ETS program, developed in collaboration with the United Federation of Teachers, was implemented in 1999-00 in all but two Chancellor's District schools. Certified, experienced private school teachers who chose to teach in the Chancellor's District received \$10,000 bonuses.³⁵

Crew also introduced several policies to improve the qualifications, quality, preparation, and stability of the leadership and staff in Chancellor's District schools. For instance, most of the Chancellor's District schools were assigned new principals. Additional assistant principals were also assigned, and both principals and assistant principals received professional development focused on how to supervise implementation of the instructional plan. The four instructional regions provided intensive and continuous support to the schools' leadership. On-site professional development specialists, including three full-time

The four instructional regions provided intensive and continuous support to the schools' leadership. On-site professional development specialists, including three full-time instructional specialists (one each in literacy, mathematics and technology), a Success for All facilitator, and a teacher center specialist,³⁸ provided consistent, intensive, highly structured professional development for all teachers in the district's schools. Teachers attended a one-week professional development program every August, in addition to the training they received on citywide staff development days.

Furthermore, many ineffective teachers were removed from the Chancellor's District schools. According to one official, the Chancellor's District absorbed the cost of approximately two dozen teachers' salaries until their cases were adjudicated, rather than allow them to remain in the classroom for months or years.³⁹

Finally, Chancellor Crew introduced two important teacher incentive initiatives for all SURR schools, including those in the Chancellor's District. The immediate impetus was the state mandate that as of September 1, 2000, only certified teachers could teach in SURR schools. In exchange for agreeing to work in SURR or other hard-to-staff schools for a full year, teachers received grants of up to \$3,400 from the Teachers for

Most of the increased spending represents increased teacher costs, including two programs designed to attract certified teachers to the Chancellor's District schools. Certified teachers who chose to work in Extended Time Schools received 15% additional pay.

³³ Chancellor's District staff member, personal interview, Feb. 19, 2003.

³⁴ Ibid.

³⁵ Patrice latarola, IESP Policy Brief: Distributing Teacher Quality Equitably: The Case of New York City. (New York: Institute for Education and Social Policy, New York University, Spring 2001), 3.

³⁶ Our analysis of the Annual School Report data indicates that 70 percent of the 58 elementary and middle schools that were in the Chancellor's District through 2000-01 had at least one change of principal, a slightly lower rate than other SURR schools, and twice the rate of all New York City schools.

³⁷ Chancellor's District: A Model of Excellence: 2001-2002. (New York City Board of Education, 2001), 26.

³⁸ Ibid: 3.

³⁹ Chancellor's District staff member, personal interview, Feb. 19, 2003.

Tomorrow program, which they could use to repay educational loans or meet other qualified educational expenses.⁴⁰

Beginning in the 1999-00 school year, candidates for teacher positions who lacked traditional certification could participate in a new alternative certification program called the New York City Teaching Fellows Program. This program paid for a master's degree in education and provided training during the summer, as well as mentors during the school year. The state gave New York City Teaching Fellows provisional certification to allow them to teach while completing their degrees. Most Teaching Fellows were placed in the Chancellor's District or other SURR schools.

SURR schools often had a disproportionate number of full-time special education students, the result of district placement decisions. City policy for all SURR schools, including Chancellor's District Schools, was to examine the number of special education students and reduce disproportionate placements.⁴¹

As these program descriptions indicate, the Chancellor's District mounted a comprehensive effort to improve the poorly performing schools removed from their sub-district jurisdiction. The next section describes how we assessed the effectiveness of the Chancellor's District's efforts to improve these schools.

The Chancellor's

District mounted

a comprehensive

effort to improve the

poorly performing

schools removed

from their

sub-district

jurisdiction.

⁴⁰ Fact Sheet I, Teachers of Tomorrow Program, 2000-2001. (New York City Board of Education, Division of Human Resources, Bureau of Recruitment Programs, 2000).

⁴¹ Chancellor's District staff member, personal interview, Feb. 6, 2003.

III. Methods and Data

o understand the nature of the intervention that the Chancellor's District represented, we analyzed official documents and conducted numerous interviews with administrators at the New York State Education Department (SED) and the New York City Department of Education (DOE). To evaluate the Chancellor's District intervention, we conducted a longitudinal analysis that compares the academic performance of Chancellor's District schools to New York City's other low performing SURR schools. We constructed a school-level panel, based on data collected from the DOE's Annual School Report Cards and School Based Expenditure Reports from 1998-99 through 2001-02.

We focused our analysis on all the elementary schools that were on the SURR list in 1998-99 and entered the Chancellor's District in 1999-00.

As a comparison group, we use the other New York City schools on the SURR list in 1998-99.

Our chief outcome variable is school-level academic performance, expressed as average scale scores, the percent of students meeting the standard (Levels 3 and 4), and the percent far below the standard (Level 1) on the state's English Language Arts (hereafter reading) and Mathematics exams. We also examined differences in student, school, and teacher characteristics, as well as general education expenditures for Chancellor's District schools, other SURR schools, and the citywide average, across all four years. Tables reporting changes over time on these variables are presented in the Findings section below. Tables reporting cross-sectional means, standard deviations, and ranges for each variable analyzed are presented in Appendix A.

Study sample

Because the number of middle schools that were on the SURR list in 1998-99 was too small to support an appropriate statistical analysis, our study focuses on elementary schools only. For the purpose of this paper, *elementary schools* are schools that had a fourth grade, regardless of their grade configuration.⁴²

As we indicated in the previous section, the Chancellor's District evolved over time, culminating in the implementation of the Model of Excellence in the 1999-00 school year. This evolution in design, and the extent of the changes in the Chancellor's District as an intervention across time, posed analytical challenges for our evaluation. Not only were different schools in—or out—of the Chancellor's District at different times, but the instructional regimen imposed on those schools also varied across time.

Our solution was to focus our analysis on the elementary schools that were on the SURR list in 1998-99 and entered the Chancellor's District in 1999-00. These schools received the full intervention described in the previous section, and we use their 1998-99 data as a baseline. As a comparison group, we use the other New York City schools on the SURR list in 1998-99.⁴³

⁴² This includes nine Kindergarten through Grade-8 schools. The remaining schools in the study had the traditional elementary school grade configuration.

⁴³ Twelve schools that entered the Chancellor's District earlier than 1998-99 were not included in this analysis. Similarly, six schools that were not designated SURR in 1998-99 were also excluded from the analysis.

As Table 3 shows, about half the elementary schools that were on the SURR list in 1998-99, entered the Chancellor's District in 1999-00. Our univariate analysis presents data for the Chancellor's District elementary schools that remained open for the four school years from 1998-99, the pre-implementation or baseline year, through 2001-02, and compares changes in

TABLE 3

Number of schools in the sample, by year

Elementary schools	1998-99	1999-00	2000-01	2001-02
All schools that remained open	50	50	50	47
Schools that closed	0	0	0	3
Chancellor's District schools	0	25	25	24
Other SURR schools	50	25	25	23

performance and other variables in those schools to changes in other SURR schools. We present the citywide averages for elementary schools as an overall benchmark.⁴⁴

Regression models

To assess the effect of the Chancellor's District intervention on school performance in the context of other potential causal factors, we developed regression models that include controls for average student characteristics (e.g., school-level English proficiency, poverty, attendance, student demographics), as well as school-level characteristics (e.g., school size, expenditures, certain teacher characteristics). Our dependent variables are school-level reading and math performance. Our basic analysis is outlined in the equation:

$$P_{st} = a + \beta_{1}S_{st} + \beta_{2}CD_{st} + \beta_{3}T_{t} + SCH_{s} + e_{st}$$
 (1)

where P_{st} is the reading or math performance of the school s in year t, S_{st} is a vector of student and school characteristics, including school size, and CD_{st} is the Chancellor's District dummy that takes a value of "1" for the Chancellor's District schools for years 1999-00, 2001-01 and 2001-02, and "0" for the baseline year 1998-99. The comparison SURR schools take "0" for all years. T_{t} is a vector of year dummies, and SCH is a school fixed effect, essentially a vector of school dummies measuring the effects of unobserved or unmeasured school characteristics, such as school culture, leadership, and other school-based factors affecting the implementation of the various SURR and Chancellor's District components. e_{st} is an error term.⁴⁵

In order to estimate and control for the effect of additional resources on schools, we estimate a fuller model:

$$P_{st} = a + \beta_{1}S_{st} + \beta_{2}CD_{st} + \beta_{3}T_{t} + \beta_{4}TCH_{st} + \beta_{5}R_{st} + SCH_{s} + e_{st}$$
 (2)

where TCH_{st} is a vector of human resources, including teacher characteristics and the number of teachers per 100 students, and R_{st} represents additional resources

⁴⁴ Schools that were ultimately closed were excluded from the univariate analysis because their inclusion draws the 1998-99 averages downward—making the Chancellor's District appear artificially successful in the later years. Conversely, closed schools are included in the regression analysis, described below, because their exclusion, as demonstrated by running the regression with and without these schools, would bias the Chancellor's District regression coefficients upward.

⁴⁵ To correct for heteroskedasticity—that is, the possibility that we over- or under-estimate the standard errors of some variables—we employ robust standard errors.

(non-teacher per student expenditures). We analyze model (2) in reference to model (1), anticipating a change in the coefficient β_2 , the Chancellor's District effect, once resources are introduced to the model.

As the next section indicates, some of our findings about the effects of the Chancellor's District as an intervention to improve low-performing schools are noteworthy, and we believe they are also practitioner-useful and policy-relevant. But we need to indicate several methodological limitations. First, because of the need for a sufficient number of schools to sustain quantitative analysis, we have concentrated on the elementary schools in the Chancellor's District and excluded the smaller number of the district's middle schools. (And, as indicated above, we also excluded the few high schools absorbed into the Chancellor's District.)

Second, any change in the standardized test performance of the Chancellor's District's elementary schools might possibly be related to changes in school enrollments caused by a variety of factors, including revised selection criteria for student entry or increased exit activity based on student or parent choice. But our aggregate data, interviews and document review do not indicate any change in student selection criteria or processes, or any increase in student exit from Chancellor's District schools not also occurring in other SURR schools, that might have contributed to test score change.⁴⁶

We included school fixed effects in the model to allow a difference in difference specification; that is, we take into account how schools differ, and we estimate the impact of the Chancellor's District over and above the general differences. This methodology offers a precise estimate of the Chancellor's District effect. However, these models estimate the effects averaged across all four years, rather than in specific years or after specific amounts of treatment time. Using school fixed effects does not allow us to control for time-invariant district-level variables, such as geographic "home" district, that may well have affected the Chancellor's District treatment in particular schools.

Our choice of SURR schools as a comparison group may make the effects of the Chancellor's District difficult to detect, because SURR schools were also the beneficiaries of additional intervention and support. While these interventions were not as intensive as the many initiatives of the Chancellor's District, SURR schools thus present a kind of moving target against which we measure the Chancellor's District performance.

While the improvement interventions for SURR schools were not as intensive as the many initiatives of the Chancellor's District, SURR schools present a kind of moving target against which we measure the Chancellor's District performance.

⁴⁶ Analyses of student level data would have allowed us to further elucidate the impact of the Chancellor's District. Unfortunately, such data was not available to us.

IV. Findings

he goal of the Chancellor's District was to increase the instructional capacity and the academic outcomes of the failing schools the district incorporated. This section presents the results of our analyses of whether, and to what extent, the Chancellor's District achieved its goal. To assess this question:

- We compare the Chancellor's District elementary schools to the other SURR elementary schools—as well as to all New York City elementary schools—on school-level characteristics and fourth grade academic performance in the 1998-99 baseline year;
- We examine changes in Chancellor's District, other SURR and the average New York City elementary schools between the 1999-00 and 2001-02 school years, after the target schools had spent three years in the Chancellor's District; and
- We report the results of our regression analyses that compare the academic performance in the Chancellor's District schools to the other SURR schools, while controlling for factors other than the Chancellor's District interventions, across all years.

Chancellor's District and other SURR schools and the citywide average, 1998-99

In the 1998-99 baseline year, Chancellor's District schools and all other SURR schools differed considerably from the average New York City elementary school across a variety of student and school characteristics. (See Table 4.) Both the Chancellor's District schools and other SURR schools were somewhat smaller, much less white, considerably poorer, and had more special education students, but fewer immigrant students, than the average New York City elementary school. The Chancellor's District schools and other SURR schools were quite similar to each other, with the important exceptions of the percent of students in full time special education and the percent of students who remained in their school for the entire year.

The other SURR schools had proportionally more students in full-

TABLE 4
Mean student and school characteristics, 1998-99

	Chancellor's District schools (N=25)	Other SURR schools (N=25)	All NYC schools (N=666)
% White	0.8	0.9	17.1
% Black	54.1	56.0	35.6
% Hispanic	43.2	41.6	36.9
% Asian/other	1.9	1.5	10.4
% Limited English proficient	16.9	15.4	14.7
% Recent immigrant	4.4	3.8	7.1
% Free lunch eligible	91.6	93.0	74.7
% Full time special education	8.0**	12.1	5.8
% In this school entire year	90.6**	87.7	91.5
% Days students attended	87.8	88.4	91.0
% Referrals to special education	4.3	4.2	3.6
% Part time special education	6.0	6.2	6.4
# Students in school	715.9	760.1	795.9

Difference between Chancellor's District and SURR schools is: *significant at .10; **significant at .05; ***significant at .001.

TABLE 5
Mean teacher characteristics and school expenditures, 1998-99

	Chancellor's District schools (N=25)	Other SURR schools (N=25)	All NYC schools (N=666)
% Licensed teachers	67.1*	72.6	81.5
% Teaching 2 or more years in this school	42.6	48.6	59.8
% Teaching 5 or more years	49.1*	54.1	59.3
% Teachers with masters degrees	69.0	71.1	77.1
Teachers per 100 students	6.7	7.2	6.4
Per student expenditures	\$7,792.8**	\$8,537.2	\$7,554.0
Per student expenditures on teachers	\$3,357.2**	\$3,777.3	\$3,509.2
Non-teacher expenditures per student	\$4,435.7	\$4,759.9	\$4,044.7

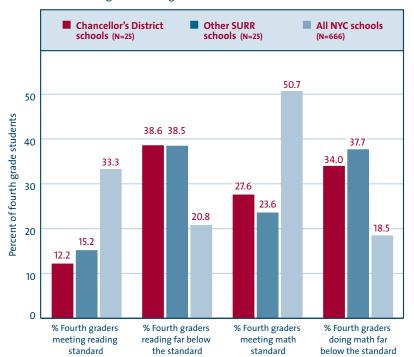
time special education than the Chancellor's District schools, and more than twice as many as the average New York City elementary school (12.1% vs. 5.8%). addition, other SURR schools had a significantly lower proportion of students who remained in the school for the entire year than the Chancellor's District schools: the latter's percentage was much closer to the citywide average. This critical variable indicates that Chancellor's District schools had significantly fewer students who moved in or out of the school during the school year than the other SURR schools.

In 1998-99, Chancellor's District Schools and other SURR schools differed considerably from the average New York City elementary school in teacher resources and school expenditures. (*See Table 5.*)

The Chancellor's District schools had the lowest level of teacher resources in the city—lower percentages of fully licensed and experienced teachers—and the least stable

FIGURE 1

Mean fourth grade reading and math results, 1998-99



teaching force. Furthermore, Chancellor's District schools spent less than did other SURR schools, in terms of both teacher expenditures and total per student expenditures.

As Figure 1 indicates, the student performance outcomes of all Chancellor's District schools and other SURR schools were considerably below the citywide average in the 1998-99 baseline year.

Table 6 indicates that student performance in the Chancellor's District schools did not differ much from performance in the other SURR schools. Chancellor's District schools had a slightly lower percentage of students meeting the standard on the fourth grade reading test than the other SURR schools, and a slightly higher average scale score on the fourth grade math tests. In both cases, the differences between the average scores were marginally significant. However, both reading and math performance

in the Chancellor's District and other SURR schools were considerably below the average performance of all the city's elementary schools.

Thus, in the 1998-99 school year, Chancellor's District and other SURR schools had much higher levels of student need, lower levels of teacher resources, and poorer student performance than the average elementary school in the New York City system. This pattern of high student need, poor teacher resources and poor student performance is what Chancellor Crew targeted for improvement through the creation of the virtual Chancellor's District, the takeover of many failing schools, and the imposition of the Model of Excellence.

TABLE 6
Mean fourth grade reading and math results, 1998-99

	Chancellor's District schools (N=25)	Other SURR schools (N=25)	All NYC schools (N=666)
Fourth grade reading scale score	606.5	607.5	628.0
% Fourth graders meeting reading standard	12.2*	15.2	33.3
% Fourth graders reading far below the standard	38.6	38.5	20.8
Fourth grade math scale score	614.2**	609.0	636.2
% Fourth graders meeting math standard	27.6	23.6	50.7
% Fourth graders doing math far below the standard	34.0	37.7	18.5

Difference between Chancellor's District and SURR schools is: *significant at .10; **significant at .05; ***significant at .001.

TABLE 7
Change in mean student and school characteristics, 1998-99 to 2001-2002

	Pre-inte	rvention			Interv	ention			Diffe	rence
	1998	3-99	1999-00		2000-01		2001-02		1999-	2002
	CD	SURR	CD	SURR	CD	SURR	CD	SURR	CD	SURR
% White	0.8	0.9	0.8	1.0	0.8	1.2	0.8*	1.3	0.0**	0.4
% Black	55.1	55.9	54.5	56.3	54.6	56.0	54.3	55.6	-0.8	-0.3
% Hispanic	42.2	41.6	42.5	40.9	42.4	41.2	42.7	41.3	0.5	-0.3
% Asian/other	1.9	1.6	2.3	1.8	2.2	1.7	2.3	1.8	0.4	0.3
% Limited English proficient	16.5	15.1	14.9	13.3	13.0	11.9	11.6	10.9	-4.9	-4.2
% Recent immigrant	4.4	3.8	4.1	3.3	3.7	3.3	4.0	3.6	-0.4	-0.1
% Free lunch eligible	91.6	92.8	89.3	91.8	87.2	90.0	87.2	90.0	-4.4	-2.8
% Full time special education	8.1**	12.4	7.9*	11.5	6.7	9.4	4.8**	7.8	-3.3	-4.6
% In this school entire year	90.5**	87.3	91.7**	89.4	91.3**	88.3	90.6**	87.1	0.1	-0.2
% Days students attended	87.9	88.3	88.5**	89.4	89.3*	90.0	90.2	90.4	2.3	2.1
% Referrals to special education	4.3	4.0	6.2	5.9	4.8	5.2	3.0***	5.8	-1.3***	1.8
% Part time special education	6.1	6.2	6.3	6.1	5.8	5.7	5.0	5.6	-1.1	-0.7
# Students in school	700.5	750.7	667.8	722.0	660.6	713.0	631.9	696.6	-68.7	-54.1

Note: Differences are calculated only for schools that existed in both 1998-99 and 2001-02

Difference between Chancellor's District and SURR schools is: *significant at .10; **significant at .05; ***significant at .001.

Changes in Chancellor's District and other SURR schools, 1998-99 to 2001-02

Student demographics in Chancellor's District schools and other SURR schools remained fairly constant from the 1998-99 baseline year through the 2001-02 school years with several important exceptions. (*See Table 7 on page 17.*) During this same period, the overall student population declined in both groups of schools, by 10% in Chancellor's District schools and 7% in other SURR schools. The proportion of special education students declined as well.

In 1998-99, the average percentage of students in full time special education in Chancellor's District schools (8.1%) was higher than the citywide average (5.8%). By 2001-02, this percentage had decreased to 4.8%, very similar to the average New York City school (4.6%). Other SURR schools experienced an even greater decline in the percentage of their students in full time special education—from 12.4% to 7.8%. However, even with that decline, the percentage of students in full time special education in the other SURR schools in 2002 was still much higher than the citywide average and the Chancellor's District average. The difference between the percentage of full time special education students in Chancellor's District and other SURR schools was highly significant in both 1998-99 and 2001-02.

The percentage of students referred for special education evaluation in Chancellor's District schools also declined by 1.3 percentage points, from 4.3% to 3.0%, between 1998-99 and 2001-02. By comparison, the referral rate in other SURR schools increased by 1.8 percentage points, from 4.0% to 5.8%. The difference between the changes in the two groups was highly significant.⁴⁷ The citywide referral rate also increased,

TABLE 8
Change in mean teacher characteristics and school expenditures, 1998-99 to 2001-2002

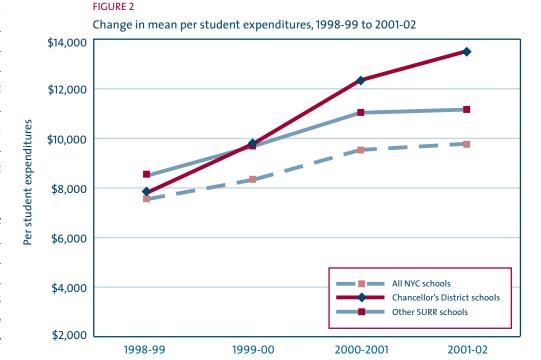
	Pre-inter	vention			Interve	ntion		Differ	ence	
	1998	8-99	1999-00		2000-01		2001	-02	1999-	
	CD	SURR	CD	SURR	CD	SURR	CD	SURR	CD	SURR
% Licensed teachers	67.2*	73	71.5	69.2	91.1	86.8	93.4*	89.7	26.2**	16.7
% Teaching 2 or more years in this school	42.2*	50.9	43.0	50.5	45.6	53.0	54.8**	62.6	12.6	11.7
% Teaching 5 or more years	49.0	54	49.0	47.5	45.2	44.1	42.8	44.0	-6.3	-10.0
% Teachers with masters degrees	68.6	70.9	70.6	67.7	69.2	68.0	70.7	70.6	2.0	-0.3
Teachers per 100 students	6.7	7.1	7.9	8.1	9.2	8.8	8.6**	7.7	1.9**	0.6
Per student expenditures on teachers	\$3,345.7**	\$3,751.2	\$4,712.7**	\$4,164.9	\$5,994.9***	\$4,962.2	\$6,430.6***	\$4,969.7	\$3,085.0***	\$1,218.5
Per student expenditures	\$7,807.5*	\$8,495.3	\$9,792.1	\$9,688.8	\$12,344.0**	\$11,033.0	\$13,520.0***	\$11,162.0	\$5,712.7***	\$2,667.0

Note: Expenditures are per student, for general education and PT special education students • Note: Differences are calculated only for schools that existed in both 1998-99 and 2001-02 • Difference between Chancellor's District and SURR schools is: *significant at .10; **significant at .05; ***significant at .001.

⁴⁷ If a relatively large number of low-scoring students are referred for evaluation by a school and then placed in full time special education classes in another school, the home school's aggregate scores will improve relative to other schools. Our analysis did not test this hypothesis with the SURR schools.

from 3.6% in 1998-99 to 4.1% in 2001-02. The proportion of students who were English language learners declined in both Chancellor's District (4.9 percentage points) and other SURR schools (4.2 percentage points), compared to a citywide decline of almost three percentage points.

Perhaps the most dramatic changes that took place in the Chancellor's District and other SURR schools occurred in resource provision. Table 8 (page 18) shows a considerable improvement in the teacher resources of the other SURR



schools, and an even more remarkable increase in the per-student expenditures of Chancellor's District schools. The formerly under-resourced Chancellor's District schools were the beneficiaries of large increases in the number, quality, and stability of their teaching staffs.

The Chancellor's District schools also benefited from major increases in funding; their per student spending increased by \$5,713 from 1998-99 to 2001-02, compared to an

increase of \$2,667 per student in other SURR schools during the same period. By contrast, the average New York City school saw a smaller \$2,234 increase in per student expenditures. The additional costs associated with the Chancellor's District's elementary schools reflects the implementation cost of the Model of Excellence in the Chancellor's District schools. (See Figure 2.)

Most of this increased expenditure was forteachers. The implementation of the Model of Excellence in Chancellor's District elementary schools not only reduced class size, but also

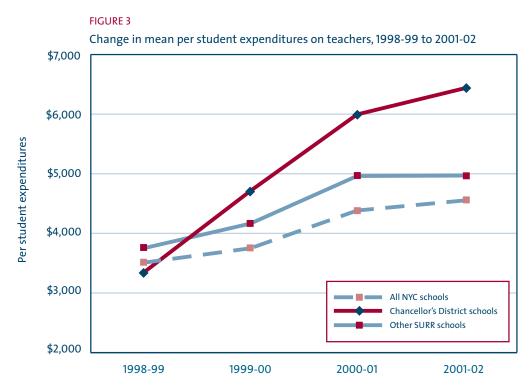
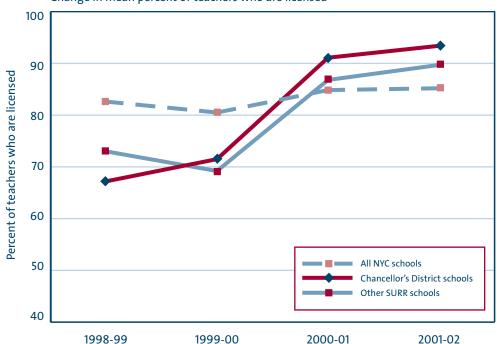


FIGURE 4
Change in mean percent of teachers who are licensed



provided at least four on-site staff developers in each school. Moreover, Chancellor's District school expenditures also involved the cost of absorbing the salaries of ineffective teachers, as well as the 15% salary differential for the additional extended time hours that teachers worked. (*See Figure 3*.)

In the 1998-99 school year, there were 6.7 teachers for every 100 students in Chancellor's District schools. This ratio increased by 1.9 teachers, to 8.6 teachers per 100 students in the 2001-02 school year. By contrast, there were 7.1 teachers for every 100 students in other SURR schools

in 1998-99, but that ratio increased by only 0.6—to 7.7 teachers—in 2001-02. The increase in the number of teachers per 100 students in Chancellor's District schools, probably a reflection of reduced class size and the increase in staff developers, was highly significant, compared to the increase in the number of teachers per 100 students in other SURR schools, as well as to the much smaller increase in the citywide average.

In 1998-99, the percentage of licensed teachers in Chancellor's District schools (67.2%) was significantly lower than in other SURR schools (73.0%). By 2001-02, the two groups' relative positions reversed, and the percentage of licensed teachers in Chancellor's District schools (93.4%) was significantly higher than in other SURR schools (89.7%). (See Figure 4.) Chancellor's District schools increased their licensed teachers by 26.2 percentage points in this three-year period, while other SURR schools increased their licensed teachers by 16.7 percentage points. The increase in the percentage of licensed teachers in Chancellor's District schools was highly significant, compared to the increase in the percentage of licensed teachers in other SURR schools, as well to the citywide average.

A third area of improvement was in the stability of the teaching staff. In 1998-99, only 42.2% of teachers in Chancellor's District schools, compared to 50.9% in other SURR schools, had been in their school for two or more years. While this statistic rose by 12.6 percentage points from 1998-99 to 2001-02 in Chancellor's District schools, it rose by a similar amount (11.7 percentage points) in other SURR schools.

Although both Chancellor's District and other SURR elementary schools experienced improvements in their overall funding and expenditure on teacher resources throughout the period, improvements in the Chancellor's District schools were greater than in the

other SURR schools. By 2001-02, Chancellor's District schools' total spending and their spending on teachers were much greater than other SURR schools, and they had a higher number of teachers per student and a higher percentage of fully licensed teachers. This situation contrasted sharply with what had prevailed four years earlier.

There were also considerable changes in academic performance in the Chancellor's District and other SURR schools from 1998-99 to 2001-02. As Table 9 shows, within those four school years, most of New York City's SURR schools improved sufficiently to be removed

TABLE 9
Change in SURR Status in New York City's SURR Schools, 1998-99 to 2001-02

NYC elementary schools that were on the SURR list in		ellor's trict	Other SURR			
1998-99 that were:	Number	Percent	Number	Percent		
Closed	1	4	2	8		
Removed from the SURR list	14	56	15	60		
Still on the SURR list	10	40	8	32		
Total	25	100	25	100		

Source: New York State Department of Education

from the state's SURR list, a considerable achievement.

Fifty-six percent of Chancellor's District schools and 60% of other SURR schools were removed from the SURR list, a similar pace of improvement for both groups of schools.

Table 10 indicates that the percentage of fourth grade students in Chancellor's District schools meeting the state's reading standard increased significantly more than did the percentage of fourth grade students in other SURR schools. In 1998-99, a lower percentage of students met the reading standard in Chancellor's District schools (12.3%) than in other SURR schools (15.3%). But by 2001-02, the two groups' relative positions reversed; more students met the reading standard in Chancellor's District schools (30%) than in other SURR schools (27.2%). The 18 percentage point improvement in the scores of Chancellor's District schools is particularly strong. The citywide

TABLE 10
Change in mean fourth grade reading and math results, 1998-99 to 2001-2002

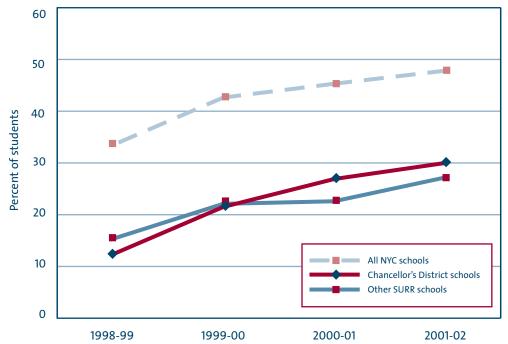
	Pre-inte	Pre-intervention		Intervention						rence
	1998	1998-99		1999-00		2000-01		1-02	1999-2002	
	CD	SURR	CD	SURR	CD	SURR	CD	SURR	CD	SURR
Fourth grade reading scale score	606.8	607.4	613.2	614.5	619.6	615.5	627.8	626.7	21.0	19.3
% Fourth graders meeting reading standard	12.3	15.3	21.5	22.1	26.9**	22.6	30.0	27.2	17.7**	11.9
% Fourth graders reading far below the standard	38.3	39.0	32.6	34.3	26.3**	32.1	21.7	21.8	-16.6	-17.2
Fourth grade math scale score	614.3*	609.4	610.7	612.1	618.7	617.8	626.0	623.5	11.8	14.1
% Fourth graders meeting math standard	27.8	23.6	22.0	23.9	30.6	29.8	38.0	34.1	10.2	10.5
% Fourth graders far below the standard in math	33.8	37.3	35.0	32.9	28.3	30.0	16.8	19.7	-17.0	-17.7

Note: Differences are calculated only for schools that existed in both 1998-99 and 2001-02

Difference between Chancellor's District and SURR schools is: *significant at .10; **significant at .05; ***significant at .001.

FIGURE 5

Change in mean percent of fourth grade students reading at or above the state standard, 1998-99 to 2001-02

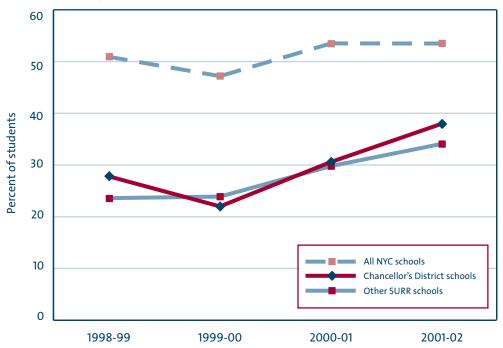


average for elementary schools across those years increased 14 percentage points—from 33.4% of fourth grade students meeting the state's reading standard in 1998-99 to 47.8% in 2001-02. (See Figure 5.)

Between the 1998-99 and 2001-02 school years, there were no significant differences in the change in math scores in Chancellor's District schools compared to other SURR schools. (See Figure 6.) However, the pattern of change in math performance is more complex. While both groups improved over these years, Chancellor's District performance, which was significantly higher than the

performance of SURR schools in 1998-99, declined in 1999-00 and recovered over the next two years. Math performance in other SURR schools, by contrast, had a continuously positive upward trajectory. The end result is that the math difference between the two groups remained essentially the same.

FIGURE 6
Change in mean percent of fourth grade students at or above the state math standard, 1998-99 to 2001-02



The findings of our univariate analyses suggest that Chancellor's District schools improved their students' reading skills more than the other SURR schools. They also show that, although both groups of schools experienced important improvements in the number and quality of their teaching staff and their expenditure levels, these changes were much more pronounced in Chancellor's District schools than in other SURR schools.

However, the univariate analysis does not provide insight into how much change can be attributed to the Chancellor's District intervention or to some of its specific components. In other words, the univariate analysis does not assess the schools' student performance while controlling for the possible effects of other factors, such as changes in the composition of the schools' student populations. Similarly, given the dramatic improvement in funding, teacher to student ratios and teacher quality, it seems important to determine how much of the change in student performance can be attributed to improved funding and teacher resources.

To examine these issues while disentangling the effects of the different factors involved, the next section presents the regression analyses we carried out to determine if the patterns in school-level performance remain after controlling for differences in student, school and teacher characteristics, as well as school expenditures.

Regression analysis

Table 11 displays the estimated differences in academic performance, controlling for student, school, and teacher characteristics, as well as per-student expenditures, between Chancellor's District schools and other SURR schools.⁴⁸ A positive coefficient in the regressions estimating effects on the percent of students scoring at or above the state reading and math standards (Levels 3 and 4) indicates a positive association with student performance. Conversely, a positive coefficient in the regressions predicting the percent far below the state reading and math standards indicates a negative association with student performance.

The coefficients suggest that, when we control for student and school characteristics, student performance on the fourth grade state reading test is significantly better in Chancellor's District schools than in other SURR schools. This is reflected in the higher average percent of students scoring at or above the standard, and in the lower percent of students scoring far below the standard.

The coefficients for the other variables show the relative importance of each variable in predicting school level performance. This influence varies across models, depending on whether the model controls for resources or not. Student characteristics (e.g., free lunch eligibility, full time special education) are generally important for explaining performance. Moreover, the coefficient on the year dummies is in many cases significant, and becomes larger in the more recent years, reflecting an overall pattern of increasing achievement in student performance across the entire sample of schools.

The Chancellor's District's effect on student performance on the fourth grade math test is not nearly as encouraging. As the regression table indicates, Chancellor's District schools do not differ significantly from other SURR schools on the percent of students scoring at Levels 3 and 4, or at Level 1.

In comparing Model 1—a basic model where teacher characteristics and expenditures are excluded—with a more complete model controlling for teacher characteristics and expenditures, we find that the results are essentially the same. In theory, in Model 1 the

⁴⁸ It is particularly important to control for student characteristics such as special education and English Language Learners, since the proportions of students in these categories were sharply reduced across the years of our analysis.

TABLE 11
Effects on fourth grade academic performance, without (Model 1) and with (Model 2) resources

		meeting	idents greading dard	reading	idents far below andard	meetin	idents ig math idard	far bel	idents ow the d in math
		Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
	Chancellor's District	5.706*** (2.043)	5.898*** (2.140)	-4.299* (2.308)	-3.944* (2.334)	-1.842 (3.066)	-2.314 (3.159)	1.615 (2.736)	2.273 (2.948)
Student &	% Black	-1.826 (1.517)	-2.850* (1.607)	-0.338 (1.483)	0.128 (1.566)	0.080 (1.814)	-1.133 (1.718)	-0.791 (2.064)	-0.024 (2.224)
school characteristics	% Hispanic	-2.396 (1.529)	-3.325** (1.608)	0.028 (1.516)	0.512 (1.555)	-0.820 (1.885)	-1.888 (1.798)	-0.456 (2.089)	0.148 (2.220)
	% Asian or other	-1.150 (1.711)	-2.550 (1.783)	0.608 (1.826)	1.129 (1.933)	-0.004 (2.260)	-1.803 (2.179)	0.350 (2.231)	1.198 (2.458)
	% Limited English proficient	0.214 (0.260)	0.307 (0.285)	-0.008 (0.277)	-0.135 (0.307)	-0.083 (0.326)	0.073 (0.353)	0.222 (0.290)	0.133 (0.312)
	% Recent immigrant	-1.228* (0.636)	-1.259** (0.629)	0.704 (0.610)	0.821 (0.625)	0.408 (0.782)	0.374 (0.776)	-0.091 (0.799)	0.040 (0.772)
	% Free lunch eligible	-0.043 (0.095)	-0.077 (0.095)	-0.132 (0.100)	-0.136 (0.107)	-0.302** (0.141)	-0.288* (0.151)	0.114 (0.137)	0.087 (0.140)
	% Full time special education	-0.092 (0.210)	-0.061 (0.213)	0.706*** (0.223)	0.639*** (0.240)	-0.453* (0.262)	-0.428 (0.282)	0.539** (0.226)	0.520** (0.234)
	% In this school entire year	-0.083 (0.218)	-0.073 (0.228)	0.039 (0.227)	0.075 (0.238)	0.007 (0.306)	0.055 (0.306)	0.244 (0.272)	0.301 (0.270)
	% Days students attended	-0.043 (0.737)	-0.232 (0.715)	0.166 (0.771)	0.511 (0.795)	0.116 (1.001)	-0.290 (0.941)	-0.083 (0.967)	0.364 (0.907)
	% Referrals to special education	-0.146 (0.265)	-0.050 (0.279)	-0.624* (0.344)	-0.708** (0.349)	0.190 (0.356)	0.273 (0.357)	-0.235 (0.314)	-0.384 (0.316)
	% Part time special education	-0.175 (0.521)	-0.435 (0.553)	-0.111 (0.561)	0.124 (0.588)	0.044 (0.612)	-0.074 (0.621)	0.844 (0.653)	1.266* (0.652)
	# Students (in thousands)	-3.390 (5.469)	6.984 (7.729)	-4.818 (6.797)	-15.263 (11.053)	-12.721* (7.093)	0.697 (10.701)	11.197* (5.867)	-9.215 (8.894)
Year dummies	2000	4.454** (1.750)	4.195** (1.906)	-1.184 (1.991)	-1.067 (2.061)	-4.116* (2.191)	-4.927** (2.440)	-0.812 (2.213)	1.051 (2.386)
	2001	7.392*** (2.056)	4.312 (2.932)	-6.203*** (2.207)	-2.488 (2.899)	2.114 (2.721)	-4.203 (3.382)	-4.281 (2.598)	2.847 (3.029)
	2002	11.248*** (2.633)	7.523** (3.414)	-13.031*** (2.503)	-8.825*** (3.221)	6.973** (3.266)	0.289 (3.986)	-13.286*** (3.236)	-6.068 (3.750)
Resources	% Licensed teachers		0.052 (0.101)		-0.108 (0.111)		0.155 (0.125)		-0.102 (0.120)
	% Teaching 2+ years in this school		0.106** (0.050)		-0.028 (0.068)		0.155** (0.067)		-0.055 (0.071)
	% Teaching 5 or more years		0.008 (0.115)		0.083 (0.122)		-0.176 (0.144)		0.207 (0.148)
	% Teachers with masters degrees		-0.199* (0.109)		0.111 (0.136)		-0.119 (0.147)		0.176 (0.136)
	Teachers per 100 students		0.043 (0.617)		0.181 (0.701)		1.050 (0.721)		-0.784 (0.753)
	Non-teacher expenditures per student		1.226 (0.770)		-1.597* (0.850)		0.721 (0.953)		-2.178*** (0.792)
	Constant	239.528 (159.714)	347.557** (165.118)	46.129 (153.976)	-22.476 (162.307)	85.590 (186.775)	207.416 (176.470)	52.090 (213.559)	-42.932 (221.389)
	Number of observations	197	195	197	195	197	195	197	195
	R-squared	0.70	0.72	0.69	0.71	0.64	0.68	0.67	0.70
	F-statistic for resource variables		1.69 (0.129)		1.02 (0.415)		2.31** (0.038)		3.14** (0.006)
	F-statistic for school fixed effects	2.044** (0.001)	2.251*** (0.000)	1.793** (0.005)	1.818** (0.004)	2.043** (0.001)	2.297*** (0.000)	1.434* (0.056)	1.706** (0.010)

Robust standard errors for parameter estimates, and p-values for F statistics, in parentheses *significant at .10; **significant at .05; ***significant at .001.

Chancellor's District coefficient could be inflated by the district's huge resource advantage versus other SURR schools. If that were the case, we would expect the coefficients for Chancellor's District dummy—and other variables—to be radically different (i.e., smaller) in Model 2, when we control for resources and teacher characteristics. The fact that Model 2 shows a substantively unchanged Chancellor's District coefficient suggests that the Chancellor's District effect is somewhat independent of resources and teacher characteristics. The positive effect of the Chancellor's District may be tied to improved instructional resources and other factors inside the "black box." Improved performance was not simply a matter of increased funding.

Equally important, Model 2 assesses the effect of resources on reading and math performance. Teacher stability has a positive effect on the percent of students meeting the standard, and non-teacher expenditures have a negative effect on the percent far below the standard. The effects of the other resource variables are not consistent across models, reflecting a generally weak relationship between resources and performance.⁴⁹ The resource variables are jointly significant in only two of the models presented here, probably for different reasons.

Overall, these regression results reiterate the univariate findings in school-level performance—on average, the Chancellor's District schools performed significantly higher in reading performance during the years these schools were under the improvement regimen described above, but did not show much progress in math. The positive regression coefficients in reading suggest a significant improvement for the Chancellor's District schools, relative to where these schools would have been and relative to comparable schools. These results are consistent when resources are added to the models.

Revisiting the twin goals of our analysis, we assess whether the Chancellor's District intervention increased schools' instructional capacity and academic outcomes. Across the 1998-99 through 2001-02 school years, the Chancellor's District schools sustained higher student stability rates, increased teacher resources, and substantially increased per student expenditures, compared to both other SURR schools and the citywide average. Moreover, holding student characteristics, teacher characteristics and expenditures constant, the Chancellor's District schools increased their fourth grade reading performance by considerably more than the other SURR schools. This finding suggests that, at the elementary school level, the Chancellor's District as an intervention succeeded in improving the reading outcomes, though not the math outcomes, of its schools and students.

The positive regression coefficients in reading suggest a significant improvement for the Chancellor's District schools, relative to where these schools would have been and relative to comparable schools. These results are consistent when resources are added to the models.

⁴⁹ This finding is consistent with the reverse causality problem in education production, where resources tend to be negatively correlated with performance due to the high correlation between categorical expenditures, such as Title 1 funds, and student characteristics, which also have an impact on performance.

V. Conclusion

The Chancellor's District, as a unique initiative in centrally-driven school improvement, represents a signal intervention into New York City school governance and administration. When Chancellor Rudy Crew, in 1996, invoked a previously unexercised power to take failing elementary and middle schools from their sub-district jurisdictions, he did what no other New York City schools chief had ever attempted. Crew proceeded to create a virtual district that eventually encompassed 58 failing schools, and developed a series of organizational, curricular, instructional, and personnel interventions, mandated for all the district's schools, to jump-start their improvement. Thus the Chancellor's District effort represents an historic departure from three decades of central school system tolerance of local sub-district practice that perpetuated instructional failure.

The Chancellor's District initiative challenges several traditions of policy analysis about the relationship between district administration and school change. Its theory of change counters reigning theories about the stultifying weight of urban education bureaucracies, the inability of loosely coupled systems to sustain centrally-driven change, and the dichotomy between what bureaucratic systems impose and the autonomy successful schools require. The Chancellor's District also represents a major departure from recent advocacy efforts to decentralize district power to increase school-level effectiveness, and practitioner efforts to adopt national school reform models through one-school-at-a-time change. Thus the Chancellor's District effort may represent a return to more traditional notions of centralized management, or a harbinger of the newly emerging emphasis on the district as the necessary locus of school change.

How the Chancellor's District initiative is ultimately assessed in the history of urban education reform depends primarily on the outcomes of the effort. Our findings suggest two categories of results. First, our univariate analysis demonstrates that the Chancellor's District intervention significantly increased teacher resources and per-student expenditure across the district's schools, and significantly increased the percentage of students meeting the standard on the fourth grade state reading tests, compared to the outcomes of other SURR schools. Second, our regression analyses demonstrate that when the Chancellor's District schools are compared to the other SURR schools (the schools most similar to those in the Chancellor's District) and when the analyses control for student and school characteristics, teacher resources and perstudent expenditures, the Chancellor's District schools do significantly better than other SURR schools in reading, but not in math.

The failure to significantly improve math scores in the Chancellor's District may be a direct result of the much more intensive curricular and scheduling focus on improving reading skills. Or the reading skills, and scores, of the Chancellor's District students may have improved at the expense of their math scores. It is important to remember that our regression analyses suggested that the Chancellor's District schools may have performed somewhat less well—although not significantly worse—than the other SURR

The Chancellor's
District initiative
challenges several
traditions of policy
analysis about
the relationship
between district
administration and
school change.

schools in math.⁵⁰ But given that the major curricular, instructional and organizational interventions of the Chancellor's District focused intensively on improving student literacy, these outcomes suggest that the Chancellor's District had begun to achieve one of its primary student achievement goals. The eventual impact of these gains in math performance is yet to be determined.

It is important to note that the district's upward curve in reading outcomes still left the Chancellor's District schools quite far below the citywide average, though the initiative was clearly narrowing the gap. It is also important to remember that the time-component of the Chancellor's District initiative that we evaluated represents only those three academic years of effort, from 1999-00 to 2001-02, in which the components of the Model of Excellence were implemented in the district's schools. Had the initiative not been terminated in 2003, would the upward curve of reading achievement have continued to rise? Would the math achievement that began to accelerate in 1999-00 have continued upward? Our data do not allow us to speculate.

Both the Chancellor's District and other SURR schools seem to have benefited from increases in teacher resources as well as in overall expenditures. The Chancellor's District schools received significantly more resources than the other SURR schools, which in turn received significantly more than the city schools as a whole. But when we control for the effects of teacher resources and per student expenditures, the Chancellor's District's elementary schools still perform significantly better than the other SURR schools in reading. Thus, something was working to improve outcomes in the Chancellor's District schools that is not explained by increases in teacher resources or school-level expenditures.

We cannot define what that something is, other than to point to the set of intervention components that comprised the Model of Excellence. Because our evaluation was retrospective, we cannot specify what components of the Model of Excellence helped to produce the reading gains our findings demonstrate. But it is important to reiterate that the Chancellor's District took over some of the city's least well-resourced schools serving the city's poorest and academically lowest performing students. By developing, mandating and implementing a comprehensive set of organizational, curricular, instructional and personnel changes, the Chancellor's District significantly improved the reading outcomes of the students in those schools, in three years of focused effort. This is not a small accomplishment. Whether the additional resources expended, in both teacher resources and per student expenditures, were ultimately worth the extent of improved achievement the Chancellor's District initiative generated, is a complex but essential question that our subsequent research will attempt to answer.

By developing, mandating and implementing a comprehensive set of organizational, curricular. instructional and personnel changes, the Chancellor's District significantly *improved the* reading outcomes of the students in those schools, in three years of focused effort. This is not a small accomplishment.

⁵⁰ It is also important to note that the Chancellor's District math scores actually improved; they did not improve at a rate that surpassed the improvement of the other SURR schools. Moreover, after a drop in math scores in 1999-00, the Chancellor's District scores managed a sharper trajectory of improvement between 1999-00 and 2001-02 than did the other SURR schools.

Works Cited

Ascher, Carol, Norm Fruchter and Ken Ikeda. Schools in Context: Final Report to the New York State Education Department 1997-1998, An Analysis of SURR Schools and Their Districts. New York: Institute for Education and Social Policy, 1999.

Bodilly, Susan J. New American Schools' Concept of Break the Mold Designs: How Designs Evolved and Why. Santa Monica, CA:RAND, MR-1288-NAS, 2001.

Chancellor's District staff member. Personal interview. Feb. 6, 2003.

Chancellor's District staff member. Personal interview. Feb. 19, 2003.

Chancellor's District staff member. Personal interview. Nov. 25, 2002.

Chubb, John E. and Terry M. Moe, *Politics, Markets and America's Schools* Washington, D.C.: The Brookings Institution, 1990.

Domanico, Raymond. "Undoing the Failure of Large School Systems: Policy Options for School Autonomy," *Journal of Negro Education 63* (1994): 19-27.

Iatarola, Patrice. *IESP Policy Brief: Distributing Teacher Quality Equitably: The Case of New York City.* New York: Institute for Education and Social Policy, Spring 2001.

Iatarola, Patrice and Norm Fruchter. "District Effectiveness: A Study of Investment Strategies in New York City Public Schools and Districts." *Educational Policy*, 18 (July 2004).

Mintrop, Heinrich. "The Limits of Sanctions in Low-performing Schools: A Study of Maryland and Kentucky Schools on Probation." *Education Policy Analysis Archives* 11(3) (2003).

New York City Board of Education. Fact Sheet I, Teachers of Tomorrow Program, 2000-2001. New York: New York City Board of Education, 2000.

- ______. Annual School Reports 1998-2001. New York: New York City Board of Education.
- ______. Budget and Operations Review Memorandum #1 FY00. New York: New York City Board of Education, 1999.
- _____. Chancellor's District: A Model of Excellence: 2001-2002. New York: New York City Board of Education, 2001.
- _____. Chancellor's District: A Model of Excellence for Extended Time Schools, 1999-2000.

 New York: New York City Board of Education, 1999.
- ______. Corrective Action Plan: A Citywide Implementation Framework for Redesign Schools. New York: New York City Board of Education, undated.
- ______. Flash Report #1. Analyses of Performance of Extended-Time and Non-Extended Time SURR Schools. New York: New York City Board of Education, September 14, 2000.
- ______. Flash Report #7. Year Two Analyses of Performance of Extended-Time and Non-Extended Time SURR Schools. New York: New York City Board of Education, May 8, 2002.
- _____. School-Based Expenditure Reports, 1998-2001. New York: New York City Board of Education.
- Resnick, L.B. and Thomas K. Glennan, "Leadership for Learning: A Theory of Action for Urban School Districts." In A.M. Hightower, M.S. Knapp, J.A. Marsh & M.W. McLaughlin (Eds.) *School Districts and Instructional Renewal.* New York: Teachers College Press, 2002), 160-172.
- Sarason, Seymour. Revisiting the Culture of the School and the Problem of Change. New York: Teachers College Press, 1996.
- Snipes, Jason, Fred Doolittle, and Corinne Herlihy. Foundations For Success: Case Studies of How Urban School Systems Improve Student Achievement. New York: MDRC for the Council of the Great City Schools, 2002.
- Weick, Karl E. "Educational Organizations as Loosely Coupled Systems." Administrative Science Quarterly 21 (1976): 1-19.

APPENDIX A

Change in mean student and school characteristics, resources and testing results for all New York City schools, 1998-99 to 2001-02

	1998-99	1999-00	2000-01	2001-02	1999-2002 difference
% White	17.3	17.1	16.8	16.6	-0.8
% Black	35.4	35.0	34.6	34.3	-1.0
% Hispanic	36.8	36.9	37.1	37.3	0.5
% Asian/other	10.6	11.1	11.4	11.8	1.3
% Limited English proficient	14.8	13.9	12.4	11.9	-2.9
% Recent immigrant	7.2	6.9	6.7	6.7	-0.5
% Free lunch eligible	74.8	74.4	73.2	73.3	-1.4
% Full time special education	5.8	5.5	5.1	4.6	-1.2
% In this school entire year	91.4	91.9	92.2	91.8	0.4
% Days students attended	91.0	91.6	92.1	92.5	1.5
% Referrals to special education	3.6	4.8	3.9	4.1	0.5
% Part time special education	6.4	6.3	5.7	5.6	-0.9
# Students in school	804.4	793.8	805.6	785.3	-17.1
% Licensed teachers	82.6	80.5	84.8	85.2	2.8
% Teaching 2 or more years in this school	60.8	62.5	62.8	64.8	4.3
% Teaching 5 or more years	60.1	56.5	53.1	53.1	-6.7
% Teachers with masters degrees	78.0	76.5	75.3	74.8	-2.9
Teachers per 100 students	6.4	6.7	7.1	6.8	0.3
Per student expenditures	\$7,548.3	\$8,334.3	\$9,533.7	\$9,783.3	\$2,234.8
Per student expenditures on teachers	\$3,509.0	\$3,750.2	\$4,383.3	\$4,551.3	\$1,047.4
Non-teacher expenditures per student	\$4,039.3	\$4,584.2	\$5,150.5	\$5,231.2	\$1,187.5
Fourth grade reading scale score	628.2	637.3	638.9	646.6	18.3
% Fourth graders meeting reading standard	33.4	42.6	45.3	47.8	14.4
% Fourth graders reading far below standard	20.6	18.3	17.3	13.5	-7.0
Fourth grade math scale score	636.4	633.2	640.0	638.6	3.0
% Fourth graders meeting math standard	50.9	47.2	53.5	53.5	2.6
% Fourth graders doing math far below standard	18.3	17.7	15.4	12.1	-6.2

APPENDIX B-1999
Student and school characteristics, resources and testing results for Chancellor's District and other SURR schools, 1998-99

	Chancellor's District schools (N=25)				Other SURR Schools (N=25)			
	Mean	SD	Min	Max	Mean	SD	Min	Max
% White	0.8	0.7	0.1	3.3	0.9	0.8	0.0	3.6
% Black	54.1	30.9	10.9	93.6	56.0	26.8	13.4	95.3
% Hispanic	43.2	31.0	4.1	87.7	41.6	26.9	3.9	85.4
% Asian/other	1.9	1.5	0.2	6.5	1.5	1.7	0.2	8.4
% Limited English proficient	16.9	16.4	0.4	65.8	15.4	10.8	0.9	42.0
% Recent immigrant	4.4	3.8	0.5	16.3	3.8	1.9	1.4	9.5
% Free lunch eligible	91.6	8.2	65.2	100.0	93.0	4.5	84.2	100.0
% Full time special education	8.0**	6.5	0.0	27.0	12.1	7.2	1.4	27.2
% In this school entire year	90.6**	3.1	81.9	95.6	87.7	5.4	71.2	95.0
% Days students attended	87.8	1.4	85.1	90.9	88.4	1.3	86.0	92.5
% Referrals to special education	4.3	2.3	1.7	11.7	4.2	2.1	1.1	9.6
% Part time special education	6.0	2.2	2.7	14.7	6.2	1.7	3.6	10.6
# Students in school	715.9	260.6	260.0	1,156.0	760.1	430.3	325.0	1,715.0
% Licensed teachers	67.1*	12.7	27.3	87.9	72.6	8.7	54.0	88.9
% Teaching 2 or more years in this school	42.6	18.7	0.0	65.3	48.6	16.7	0.0	66.7
% Teaching 5 or more years	49.1*	11.8	18.2	67.4	54.1	9.1	30.1	66.7
% Teachers with masters degrees	69.0	9.6	40.9	87.2	71.1	7.7	58.6	83.3
Teachers per 100 students	6.7	1.5	5.0	11.5	7.2	1.2	4.8	9.0
Per student expenditures	\$7,792.8**	\$1,138.1	\$5,485.9	\$12,072.0	\$8,537.2	\$1,385.7	\$6,230.8	\$11,528.0
Per student expenditures on teachers	\$3,357.2***	\$376.6	\$2,442.2	\$4,073.7	\$3,777.3	\$574.4	\$2,961.5	\$4,795.5
Non-teacher expenditures per student	\$4,435.7	\$905.8	\$3,043.7	\$8,104.8	\$4,759.9	\$928.7	\$3,269.3	\$6,851.0
Fourth grade reading scale score	606.5	9.4	586.0	620.8	607.5	8.5	579.4	623.2
% Fourth graders meeting reading standard	12.1*	5.6	3.3	23.1	15.2	6.9	1.5	37.8
% Fourth graders reading far below standard	38.6	9.8	21.7	54.3	38.5	7.1	23.2	56.1
Fourth grade math scale score	614.2*	10.9	594.4	635.2	609.0	6.6	594.6	623.6
% Fourth graders meeting math standard	27.6	11.7	11.3	52.8	23.6	7.1	12.3	38.4
% Fourth graders doing math far below standard	34.0	11.3	15.8	51.3	37.7	6.2	27.7	51.9

APPENDIX B-2000
Student and school characteristics, resources and testing results for Chancellor's District and other SURR schools, 1999-00

	Chancellor's District schools (N=25)				Other SURR Schools (N=25)			
	Mean	SD	Min	Max	Mean	SD	Min	Max
% White	0.8	0.7	0.0	2.9	1.0	0.8	0.0	3.7
% Black	53.5	30.3	10.1	94.0	56.4	26.0	14.9	94.3
% Hispanic	43.5	30.3	2.9	88.6	40.9	25.7	4.7	83.7
% Asian/other	2.2	1.8	0.3	8.4	1.7	1.4	0.4	6.0
% Limited English proficient	15.3	14.3	0.7	57.4	13.6	9.1	1.6	29.3
% Recent immigrant	4.1	3.8	0.0	14.7	3.3	1.5	0.9	6.7
% Free lunch eligible	89.4	8.2	65.2	100.0	92.1	6.0	76.6	100.0
% Full time special education	7.8	6.1	0.0	23.7	11.4	7.6	0.0	27.0
% In this school entire year	91.5	3.3	85.6	97.8	89.6	3.4	84.4	98.1
% Days students attended	88.4	1.7	84.6	92.1	89.4	1.3	86.6	92.9
% Referrals to special education	6.1	3.5	1.5	16.4	5.8	2.4	2.2	14.0
% Part time special education	6.2	2.7	2.2	16.9	6.1	1.5	4.2	9.2
# Students in school	684.8	262.0	242.0	1,192.0	697.1	298.6	325.0	1,718.0
% Licensed teachers	71.4	10.1	50.0	90.0	69.5	8.2	55.1	86.4
% Teaching 2 or more years in this school	43.7*	19.3	0.0	72.2	51.0	9.7	33.3	76.5
% Teaching 5 or more years	49.3	8.6	29.2	65.0	48.1	9.7	32.7	65.0
% Teachers with masters degrees	70.9	9.4	50.0	88.6	68.8	8.5	53.8	86.7
Teachers per 100 students	7.8	1.7	5.7	12.5	8.2	1.2	6.0	10.7
Per student expenditures	\$9,792.1	\$1,569.0	\$7,662.3	\$15,008.0	\$9,688.8	\$1,018.3	\$8,516.7	\$12,193.0
Per student expenditures on teachers	\$4,712.7**	\$786.2	\$3,463.6	\$6,716.0	\$4,164.9	\$486.2	\$3,418.7	\$5,411.6
Non-teacher expenditures per student	\$5,079.5*	\$963.3	\$3,938.1	\$8,292.1	\$5,523.9	\$642.4	\$4,613.4	\$6,781.5
Fourth grade reading scale score	612.8	10.1	595.7	632.4	613.5	10.6	595.5	632.4
% Fourth graders meeting reading standard	21.0	8.2	9.1	36.5	21.5	7.3	7.9	41.3
% Fourth graders reading far below standard	33.2	9.6	13.0	49.2	35.5	11.6	13.7	57.9
Fourth grade math scale score	610.7	6.4	600.2	620.7	612.1	9.9	593.0	631.5
% Fourth graders meeting math standard	22.0	6.3	10.6	32.6	23.9	8.4	6.9	41.9
% Fourth graders doing math far below standard	35.0	8.0	23.8	50.0	32.9	11.5	12.8	58.1

APPENDIX B-2001
Student and school characteristics, resources and testing results for Chancellor's District and other SURR schools, 2000-01

	Chancellor's District schools (N=25)				Other SURR Schools (N=25)			
	Mean	SD	Min	Max	Mean	SD	Min	Max
% White	0.8	0.8	0.1	3.5	1.2	1.0	0.1	4.5
% Black	53.4	30.0	11.3	94.6	56.2	26.1	17.1	94.1
% Hispanic	43.7	30.0	3.3	86.8	41.1	25.8	4.9	81.4
% Asian/other	2.1	1.9	0.3	8.9	1.6	1.4	0.3	5.6
% Limited English proficient	13.7	12.0	0.5	45.0	12.2	9.1	1.0	32.5
% Recent immigrant	3.7	2.8	1	12.6	3.3	1.8	0.7	9.0
% Free lunch eligible	87.4	10.0	70.8	100.0	90.4	9.8	51.9	100.0
% Full time special education	6.7*	5.8	0.0	21.3	9.8	6.6	0.0	24.0
% In this school entire year	91.6***	3.0	85.4	98.6	88.6	4.1	78.6	96.8
% Days students attended	89.3*	1.6	86.2	92.4	90.0	1.3	87.1	94.1
% Referrals to special education	5.1	2.7	1.7	11.7	5.2	1.6	2.1	8.7
% Part time special education	5.8	2.7	1.3	16.5	5.7	1.8	3.5	10.2
# Students in school	644.8	236.7	254	1178	677.6	313.8	205.0	1677.0
% Licensed teachers	90.9	6.4	75.9	100	87.1	10.6	57.4	98.4
% Teaching 2 or more years in this school	45.5**	10.7	26.3	62.9	53	10.8	28	75.9
% Teaching 5 or more years	45.6	10.2	17.2	57.1	45.4	9.7	28.6	61.3
% Teachers with masters degrees	69.5	11.1	41.4	86.4	68.7	5.6	57.1	77.4
Teachers per 100 students	9.3	1.4	6.7	11.3	9.2	1.8	7.1	15.1
Per student expenditures	\$12,647.0	\$2,197.1	\$9,805.2	\$19,924.0	\$11,828.0	\$3,485.0	\$9,437.5	\$26,960.0
Per student expenditures on teachers	\$6,089.2**	\$987.9	\$4,600.0	\$8,354.6	\$5,218.8	\$1,174.5	\$3,905.7	\$9,210.7
Non-teacher expenditures per student	\$6,349.3	\$932.1	\$5,205.2	\$9,398.0	\$6,071.0	\$741.0	\$5,085.0	\$8,085.0
Fourth grade reading scale score	619.2	9.9	592.9	633.8	615.8	8.2	599.7	632.7
% Fourth graders meeting reading standard	26.3	7.4	12.4	40.4	23.1	6.6	6.6	35.7
% Fourth graders reading far below standard	26.7	7.9	15.7	41.4	31.9	7.1	17.6	45.8
Fourth grade math scale score	618.7	9.2	597.8	638.8	617.8	8.8	594.7	633.0
% Fourth graders meeting math standard	30.6	11.6	8.5	57.9	29.8	9.6	7.3	50.0
% Fourth graders doing math far below standard	28.3	8.8	11.8	43.8	30.1	8.9	16.4	50.0

APPENDIX B-2002
Student and school characteristics, resources and testing results for Chancellor's District and other SURR schools, 2001-02

	Chancellor's District schools (N=25)				Other SURR Schools (N=25)			
	Mean	SD	Min	Max	Mean	SD	Min	Max
% White	0.8	1.0	0.0	3.9	1.3	1.0	0.2	4.5
% Black	54.3	29.5	11.4	95.4	55.6	25.4	16.7	94.6
% Hispanic	42.7	29.3	2.8	86.8	41.3	25.2	4.1	81.5
% Asian/other	2.3	1.9	0.4	8.5	1.8	1.6	0.2	6.2
% Limited English proficient	11.6	10.4	0.7	41.3	10.9	7.8	1.2	27.1
% Recent immigrant	4.0	2.9	1.1	13.0	3.6	1.9	1.0	9.9
% Free lunch eligible	87.2	10.2	70.8	100.0	90.0	10.0	51.9	100.0
% Full time special education	4.8*	4.9	0.2	20.3	7.8	4.2	2.3	19.1
% In this school entire year	90.6***	2.7	85.8	97.7	87.1	4.0	77.4	93.6
% Days students attended	90.2	1.4	87.8	92.6	90.4	1.3	87.0	94.0
% Referrals to special education	3.0***	2.8	0.0	8.2	5.8	2.4	1.7	12.4
% Part time special education	5.0	2.1	2.2	10.7	5.6	2.4	2.6	11.2
# Students in school	631.9	217.0	281.0	1,114.0	696.6	299.7	313.0	1,677.0
% Licensed teachers	93.4*	5.3	76.4	100.0	89.7	8.7	66.7	100.0
% Teaching 2 or more years in this school	54.8***	10.4	36.5	75.6	62.6	11.7	31.5	76.8
% Teaching 5 or more years	42.8	10.9	17.1	57.1	44.0	7.8	29.7	58.6
% Teachers with masters degrees	70.7	8.6	54.3	88.2	70.6	7.4	58.5	91.3
Teachers per 100 students	8.6**	1.2	5.9	10.8	7.7	1.1	6.1	10.1
Per student expenditures	\$13,520.0***	\$2,102.9	\$9,062.5	\$17,768.0	\$11,162.0	\$1,610.6	\$9,281.4	\$16,449.0
Per student expenditures on teachers	\$6,430.6***	\$1,037.5	\$4,482.6	\$9,062.6	\$4,969.7	\$719.4	\$3,756.8	\$6,558.5
Non-teacher expenditures per student	\$7,089.5**	\$1,417.2	\$4,579.9	\$10,053.0	\$6,192.6	\$1,091.3	\$5,178.3	\$9,890.1
Fourth grade reading scale score	627.8	8.7	612.5	647.7	626.7	8.5	611.1	647.8
% Fourth graders meeting reading standard	30.0	9.8	123.7	50.4	27.2	9.0	16.0	50.5
% Fourth graders reading far below standard	21.7	7.3	9.2	37.9	21.8	7.0	8.9	34.7
Fourth grade math scale score	626.0	7.5	609.1	644.9	623.5	8.7	604.9	636.9
% Fourth graders meeting math standard	38.0	10.6	23.2	64.7	34.1	11.8	15.9	58.1
% Fourth graders doing math far below standard	16.8	6.7	5.9	32.3	19.7	8.3	5.7	39.7



Recent IESP reports

- Ascher, Carol, Juan Echazarreta, Robin Jacobowitz, Yolanda McBride, Tammi Troy and Nathalis Wamba. Charter School Accountability in New York: Findings from a Three-Year Study of Charter School Authorizers, 2003.
- Ascher, Carol, Juan Echazarreta, Robin Jacobowitz, Yolanda McBride and Tammi Troy. Governance and Administrative Structure in New York City Charter Schools, 2003.
- Ascher, Carol, Clyde Cole, Juan Echazarreta, Robin Jacobowitz, Yolanda McBride. Private Partners and the Evolution of Learning Communities in Charter Schools: Going Charter in New York City: Fourth Year Findings, 2004.
- Jacobowitz, Robin and Jonathan Gyurko. Charter School Funding in New York: Perspectives on Parity with Traditional Public Schools, 2004.
- Mediratta, Kavitha and Jessica Karp. Parent Power and Urban School Reform: The Story of Mothers on the Move, 2003.
- Mediratta, Kavitha and Norm Fruchter. From Governance to Accountability: Building Relationships that Make Schools Work, 2003.
- Zimmer, Amy. Lessons from the Field of School Reform Organizing: A Review of Strategies for Organizers and Leaders, 2004.

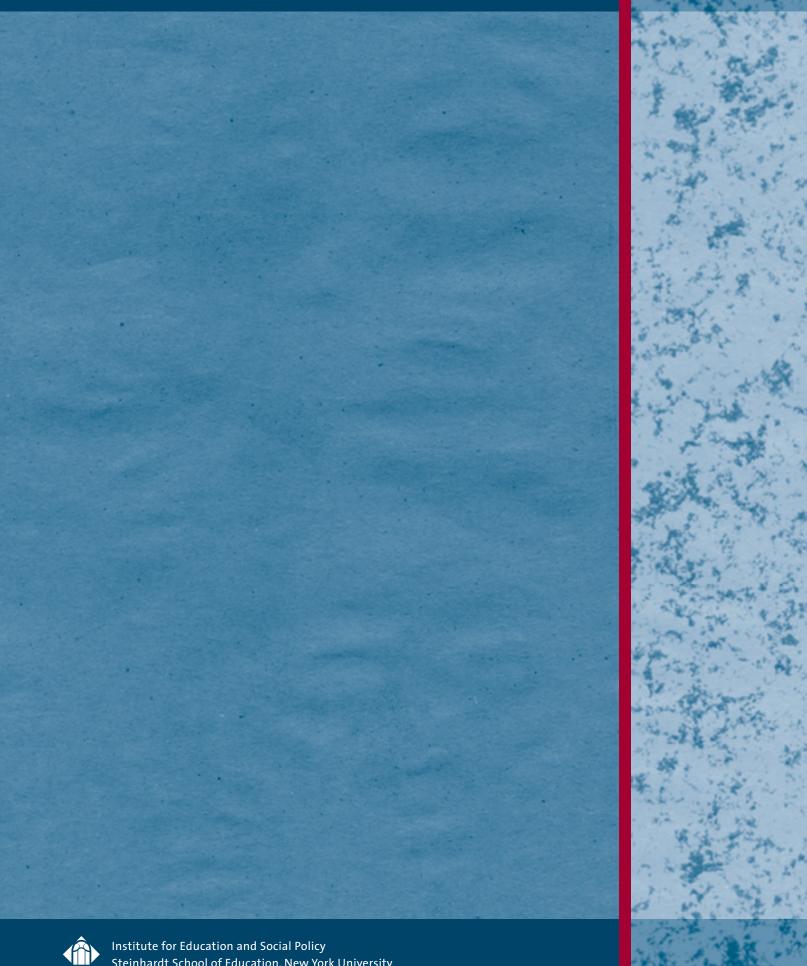
Other recent reports by Institute authors

- Ascher, Carol, Clyde Cole, Jodie Harris and Juan Echazarreta. *The Finance Gap: Charter Schools and their Facilities*. New York, NY: Local Initiatives Support Corporation, 2004.
- Stiefel, Leanna, Amy Ellen Schwartz, & Colin C. Chellman. Education Finance Research Consortium Condition Report: Beyond Black and White: Patterns and Relationships in New York State Test Score Gaps. Albany, NY: Center for Policy Research, Rockefeller College, University at Albany, 2003.
- Siegel, Dorothy. "Performance Driven Budgeting: The Example of New York City's Schools." ERIC Digest, 168 (2003).

Recent journal articles by Institute authors

Ascher, Carol and Edwina Branch. "Precarious Space." Teachers College Review. (Fall 2004).

- Iatarola, Patrice and Norm Fruchter. "District Effectiveness: A Study of Investment Strategies in New York City Public Schools and Districts." *Educational Policy*, 18, no.3 (July 2004).
- Iatarola, Patrice and Leanna Stiefel. "Intradistrict Equity of Public Education Resources and Performance." *Economics of Education Review*, 22 (2003).





Steinhardt School of Education, New York University 726 Broadway, 5th Floor, New York, NY 10003
Tel (212) 998-5880 • Fax (212) 995-4564 • iesp@nyu.edu • www.nyu.edu/iesp